

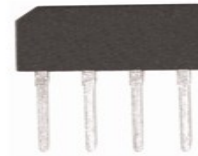
**VOLTAGE RANGE: 50 - 800V**  
**CURRENT: 2.0 A**

### Features

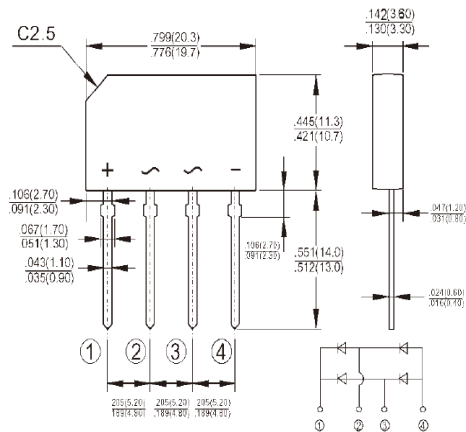
- Glass passivated junction
- Ideal for printed circuit board
- High case dielectric strength
- Plastic material has Underwriters laboratory flammability Classification 94V-0
- High surge current capability  
High temperature soldering guaranteed:  
260°C/10 seconds / .375", (9.5mm) lead lengths.

### Mechanical Data

- Case: Molded plastic body
- Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, Method 208
- Weight: 2.0 grams
- Mounting position: Any



**GBL**



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	D2SB05	D2SB10	D2SB20	D2SB40	D2SB60	D2SB80	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	V
Maximum Average Forward Rectified Current @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	2						A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80						A
Rating of fusing ( $t < 8.3\text{ms}$ ) ( $t < 10\text{ms}$ )	$I^2T$	27 32						$\text{A}^2\text{S}$
Maximum Instantaneous Forward Voltage @2.0A	$V_F$	1.1						V
Maximum DC Reverse Current at Rated DC Block Voltage (Note 1) @ $T_A=25^\circ\text{C}$ @ $T_A=125^\circ\text{C}$	$I_R$	10 500						$\mu\text{A}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	47 10						$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	- 55 to + 150						$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 150						$^\circ\text{C}$

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

2 : Units Mounted In Free Air No Heat Sink On PCB 0.5" x 0.5"(12x12mm) Copper Pads, 0.375"(9.5mm) Lead Length.



FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

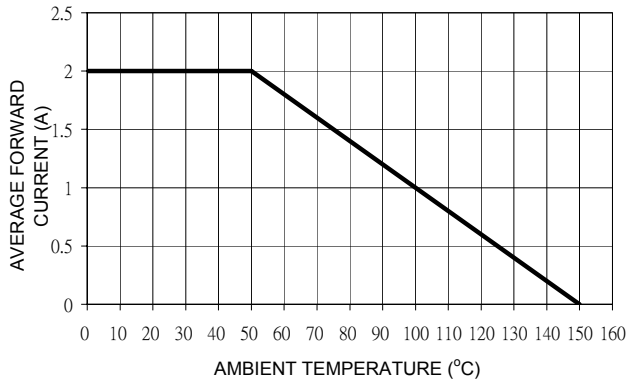


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

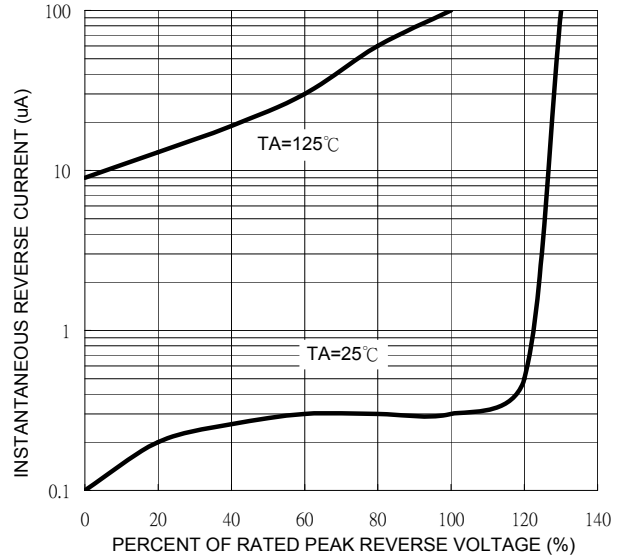


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

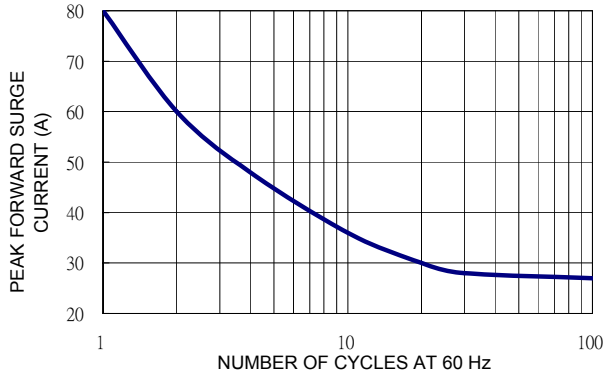


FIG. 4 TYPICAL JUNCTION CAPACITANCE

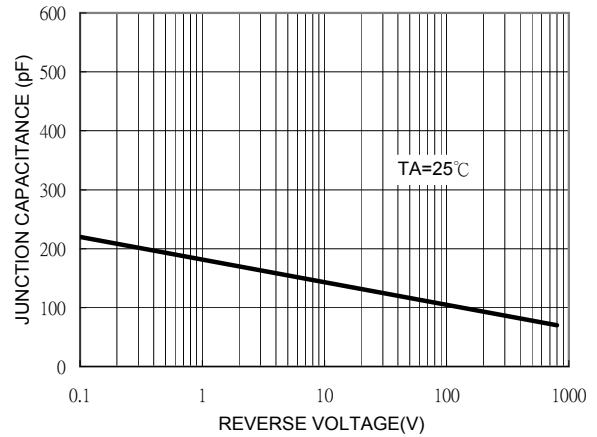


FIG. 5 TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

